UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/386,848	08/31/1999	IZUMI MIYAKE	0879-0240P	1868

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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER
HANNETT, JAMES M

ART UNIT	PAPER NUMBER
2612	

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>24 October 2005</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>3-5,8 and 9</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>3-5,8 and 9</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>31 August 1999</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☒ All   b)☐ Some * c)☐ None of:

        1.☒ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 10/24/2005 has been entered.

Response to Arguments

Applicant's arguments filed 9/26/2005 have been fully considered but they are not

persuasive. The applicant argues that the current grounds of rejection does not teach the newly

added claim limitation that the additional information includes the shooting mode in which the

image was captured. The examiner disagrees with the applicant. The examiner points out that

Totofuku et al teaches on Column 7, Lines 19-26 the use of a camera that allows a user to set a

camera mode in which the camera can perform panoramic shooting or single image shooting.

Totofuku et al further teaches that after an image is captured additional information regarding

characteristics of the image are stored in the image header (Column 14, Lines 17-21). Totofuku

et al teaches that the images are assigned a panoramic number to indicate the images location in

the panoramic image. Furthermore, Totofuku et al teaches on Column 13, Line 66 to Column 14,

Line 5 that if the captured image is not part of a panoramic image, the panoramic number will be

set to a code corresponding to an ordinary photographed frame. Therefore, the header

information related to the panoramic number is viewed by the examiner as the additional

information includes the shooting mode (ordinary photographed frame/panoramic photographed

frame) in which the image was captured.

In response to applicant's arguments against the references individually, one cannot show

nonobviousness by attacking references individually where the rejections are based on

combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re*

Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The applicant argues that Suzuki teaches obtaining a single image and does not teach

composing the main image from at least two captured images. The examiner points out that

Suzuki was not relied upon by the examiner to teach the stated limitation. The examiner relied

upon the teachings of Totofuku et al to teach the process of generating a panoramic image from

at least two captured images.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

1:   Claims 3-5, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over US

2001/0048465 Toyofuku et al in view of USPN 5,724,579 Suzuki in view of USPN 5,930,514

Thompson et al.

2:     As for Claim 3, Toyofuku et al depicts in Figures (5 and 20) an image processing

apparatus, comprising: A memory (33) which stores a plurality of captured images and

additional information concerning the images; Toyofuku et al teaches and depicts in Figure 6 the

data format by which the image data is stored to memory and depicts the non-image information

that is saved with the image data. An image selector which selects an image to be erased among

the plurality of images stored in the memory; Paragraph [0133] Toyofuku et al teaches that a

circular point is flickered and represents the image data selected to be erased. A determination

device which reads the additional information (panoramic number) concerning the selected

image and determines whether or not the selected image relates to at least one of the plurality of

images stored in the memory with reference to the read additional information; Paragraph [0136]

Toyofuku et al teaches that the image processing apparatus checks to see whether the image

selected partially constitutes a panoramic image (panoramic number does not contain code that

corresponds to a ordinary photographed frame) by identifying the panorama numbers in the

header information as depicted in Figure 6. Toyofuku et al teaches the use of an eraser which

erases the selected image from the memory if the determination device determines that the

selected imager does not relate to any of the plurality of images stored in the memory, and

prohibits the selected image from being erased independently if the determination device

determines that the selected image relates to at least one of the plurality of images stored in the

memory. Paragraph [0136-0137] Toyofuku et al teaches that if the image selected to be erased is

part of a panoramic image a warning is indicated to the user and the image cannot be erased

independently and the image would not be able to be erased unless the user overrides the erase

protection. Toyofuku et al further teaches the use of a display which displays that the selected

image is prohibited from being erased independently if the determination device determines that

the selected image relates to at least one of the plurality of images stored in the memory;

Paragraphs [0136 and 0141] Toyofuku et al teaches the a warning is given on the display screen when an image that is part of a panoramic image is selected to be deleted. Toyofuku et al further teaches that the additional information represents whether or not the image concerning the/ additional information is a part of a panoramic image composed of at least two of the plurality of the images stored in the memory; Paragraph [0136] the image processing apparatus checks to see whether the image selected partially constitutes a panoramic image by identifying the panorama numbers in the header information as depicted in Figure 6.

Toyofuku et al does not teach that the decision device decides whether to collectively erase the selected image and the at least one of the plurality of images related to the selected image from the memory; wherein the eraser erases the selected image and the at least one of the plurality of images relating to the selected image from the memory if the decision device decides to collectively erase the selected image and the at least one of the plurality of images related to the selected image. Toyofuku et al is designed in such a way that a user using the camera will be warned if they attempt to delete the image so that the user can cancel the erase command if the image was inadvertently selected. The camera further has the capability to allow the user to override the erase protection and erase the single image and therefore update the panoramic image data.

Suzuki teaches on Column 5, Lines 61-67 and Column 6, Lines 5-16 the method of collectively deleting images associated with a main image simultaneously to allow a user the option to erase the images related to a main image simultaneously so that the user would not have to independently erase each of the pictures and thus providing convenience of use. It is

viewed by the examiner that a panoramic image is a main image that is associated with several subordinate images.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the camera of Toyofuku et al to allow a user the option to erase the images related to a main image simultaneously as taught by Suzuki so that the user would not have to independently erase each of the pictures and thus provide convenience of use.

However, Suzuki does not specifically state that all of the related images are erased collectively and only states that the related images can be collectively erased.

Thompson et al teaches on Column 1, Lines 58-67 a method for collectively deleting all files related to a program which a user wants to erase be erased at the same time in order to speed up the erasing operation and ensure that no un-needed files remain after the program files have been erased.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the file deletion program of Toyofuku et al in view of Suzuki collectively erase all related images simultaneously to ensure that no un-needed image files remain after a some of the image files have been erased and therefore, speeding up the erasing operation.

3:        In regards to Claim 4, Toyofuku et al depicts in Figures (5 and 20) an image processing apparatus, comprising: A memory (33) which stores a plurality of captured images and additional information (header information including panoramic number) concerning the images; Toyofuku et al teaches and depicts in Figure 6 the data format by which the image data is stored to memory and depicts the non-image information that is saved with the image data. An image

selector which selects an image to be erased among the plurality of images stored in the memory;

Paragraph [0133] Toyofuku et al teaches that a circular point is flickered and represents the

image data selected to be erased. A determination device which reads the additional information

concerning the selected image and determines whether or not the selected image relates to at

least one of the plurality of images stored in the memory with reference to the read additional

information; Paragraph [0136] Toyofuku et al teaches that the image processing apparatus

checks to see whether the image selected partially constitutes a panoramic image (panoramic

number does not contain code that corresponds to a ordinary photographed frame) by identifying

the panorama numbers in the header information as depicted in Figure 6. Toyofuku et al teaches

the use of an eraser which erases the selected image from the memory if the determination device

determines that the selected imager does not relate to any of the plurality of images stored in the

memory, and prohibits the selected image from being erased independently if the determination

device determines that the selected image relates to at least one of the plurality of images stored

in the memory. Paragraph [0136-0137] Toyofuku et al teaches that if the image selected to be

erased is part of a panoramic image a warning is indicated to the user and the image cannot be

erased independently and the image would not be able to be erased unless the user overrides the

erase protection. Toyofuku et al further teaches the use of a display which displays that the

selected image is prohibited from being erased independently if the determination device

determines that the selected image relates to at least one of the plurality of images stored in the

memory; Paragraphs [0136 and 0141] Toyofuku et al teaches the a warning is given on the

display screen when an image that is part of a panoramic image is selected to be deleted.

Toyofuku et al further depicts in Figure 6 the format for the header information attached to the

image data. The additional information represents whether or not the image concerning the

additional information is a part of a sequence of at least two of the plurality of the images stored

in the memory that were consecutively captured. Paragraphs [0105-0106] Toyofuku teaches that

when a panoramic image is captured all the images are captured in a sequence until all the

desired images for a panoramic image are captured and panoramic numbers related to the order

in which the images are captured and stored in the header information. This header information

is then used to determine if the image is part of a panoramic image. Since the panoramic image

was captured from a sequence of consecutive images, the additional information represents

whether or not the image concerning the additional information is a part of a sequence of at least

two of the plurality of the images stored in the memory that were consecutively captured.

Toyofuku et al does not teach that the decision device decides whether to collectively

erase the selected image and the at least one of the plurality of images related to the selected

image from the memory; wherein the eraser erases the selected image and the at least one of the

plurality of images relating to the selected image from the memory if the decision device decides

to collectively erase the selected image and the at least one of the plurality of images related to

the selected image. Toyofuku et al is designed in such a way that a user using the camera will be

warned if they attempt to delete the image so that the user can cancel the erase command if the

image was inadvertently selected. The camera further has the capability to allow the user to

override the erase protection and erase the single image and therefore update the panoramic

image data.

Suzuki teaches on Column 5, Lines 61-67 and Column 6, Lines 5-16 the method of

collectively deleting images associated with a main image simultaneously to allow a user the

option to erase the images related to a main image simultaneously so that the user would not

have to independently erase each of the pictures and thus providing convenience of use. It is

viewed by the examiner that a panoramic image is a main image that is associated with several

subordinate images.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to enable the camera of Toyofuku et al to allow a user the option to erase the

images related to a main image simultaneously as taught by Suzuki so that the user would not

have to independently erase each of the pictures and thus provide convenience of use.

However, Suzuki does not specifically state that all of the related images are erased

collectively and only states that the related images can be collectively erased.

Thompson et al teaches on Column 1, Lines 58-67 a method for collectively deleting all

files related to a program which a user wants to erase be erased at the same time in order to speed

up the erasing operation and ensure that no un-needed files remain after the program files have

been erased.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to allow the file deletion program of Toyofuku et al in view of Suzuki

collectively erase all related images simultaneously to ensure that no un-needed image files

remain after a some of the image files have been erased and therefore, speeding up the erasing

operation.

4:       As for Claim 5, Toyofuku et al depicts in Figure 5 and teaches in Paragraph [0056] that

the image processing apparatus is an electronic camera capturing the images.

5:      In regards to Claim 8, Toyofuku et al depicts in Figures (5 and 20) a method for erasing

an image from a memory, comprising the steps of: selecting the image to be erased among a

plurality of images stored in the memory; Paragraph [0133] Toyofuku et al teaches that a circular

point is flickered and represents the image data selected to be erased. Reading an additional

information concerning the image selected in the selecting step and determining whether or not

the selected image relates to at least one of the plurality of images stored in the memory

(panoramic number does not contain code that corresponds to a ordinary photographed frame)

with reference to the additional information read in the reading step; Paragraph [0136] Toyofuku

et al teaches that the image processing apparatus checks to see whether the image selected

partially constitutes a panoramic image (panoramic number does not contain code that

corresponds to a ordinary photographed frame) by identifying the panorama numbers in the

header information as depicted in Figure 6.Erasing the selected image from the memory if it is

determined that the selected image does not relate to any of the plurality of images stored in the

memory in the determining step; and prohibiting the selected image from being erased

independently if it is determined that the selected image relates to at least one of the plurality of

images stored in the memory in the determining step; Paragraph [0136-0137] Toyofuku et al

teaches that if the image selected to be erased is part of a panoramic image a warning is indicated

to the user and the image cannot be erased independently and the image would not be able to be

erased unless the user overrides the erase protection. Toyofuku et al further teaches the use of a

display which displays that the selected image is prohibited from being erased independently if

the determination device determines that the selected image relates to at least one of the plurality

of images stored in the memory; Paragraphs [0136 and 0141] Toyofuku et al teaches the a

warning is given on the display screen when an image that is part of a panoramic image is selected to be deleted. Toyofuku et al further teaches that the additional information represents whether or not the image concerning the/ additional information is a part of a panoramic image composed of at least two of the plurality of the images stored in the memory; Paragraph [0136] the image processing apparatus checks to see whether the image selected partially constitutes a panoramic image by identifying the panorama numbers in the header information as depicted in Figure 6.

Toyofuku et al does not teach that the decision device decides whether to collectively erase the selected image and the at least one of the plurality of images related to the selected image from the memory; wherein the eraser erases the selected image and the at least one of the plurality of images relating to the selected image from the memory if the decision device decides to collectively erase the selected image and the at least one of the plurality of images related to the selected image. Toyofuku et al is designed in such a way that a user using the camera will be warned if they attempt to delete the image so that the user can cancel the erase command if the image was inadvertently selected. The camera further has the capability to allow the user to override the erase protection and erase the single image and therefore update the panoramic image data.

Suzuki teaches on Column 5, Lines 61-67 and Column 6, Lines 5-16 the method of collectively deleting images associated with a main image simultaneously to allow a user the option to erase the images related to a main image simultaneously so that the user would not have to independently erase each of the pictures and thus providing convenience of use. It is

viewed by the examiner that a panoramic image is a main image that is associated with several

subordinate images.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to enable the camera of Toyofuku et al to allow a user the option to erase the

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to allow the file deletion program of Toyofuku et al in view of Suzuki

collectively erase all related images simultaneously to ensure that no un-needed image files

remain after a some of the image files have been erased and therefore, speeding up the erasing

operation.

6:       As for Claim 9, Toyofuku et al depicts in Figures (5 and 20) a method for erasing

an image from a memory, comprising the steps of: selecting the image to be erased among a

plurality of images stored in the memory; Paragraph [0133] Toyofuku et al teaches that a circular

point is flickered and represents the image data selected to be erased. Reading an additional

information (header information including panoramic number) concerning the image selected in

the selecting step and determining whether or not the selected image relates to at least one of the

plurality of images stored in the memory with reference to the additional information read in the

reading step; Paragraph [0136] Toyofuku et al teaches that the image processing apparatus

checks to see whether the image selected partially constitutes a panoramic image (panoramic

number does not contain code that corresponds to a ordinary photographed frame) by identifying

the panorama numbers in the header information as depicted in Figure 6.Erasing the selected

image from the memory if it is determined that the selected image does not relate to any of the

plurality of images stored in the memory in the determining step; and prohibiting the selected

image from being erased independently if it is determined that the selected image relates to at

least one of the plurality of images stored in the memory in the determining step; Paragraph

[0136-0137] Toyofuku et al teaches that if the image selected to be erased is part of a panoramic

image a warning is indicated to the user and the image cannot be erased independently and the

image would not be able to be erased unless the user overrides the erase protection. Toyofuku et

al further teaches the use of a display which displays that the selected image is prohibited from

being erased independently if the determination device determines that the selected image relates

to at least one of the plurality of images stored in the memory; Paragraphs [0136 and 0141]

Toyofuku et al teaches the a warning is given on the display screen when an image that is part of

a panoramic image is selected to be deleted. Toyofuku et al further depicts in Figure 6 the format

for the header information attached to the image data. The additional information represents

whether or not the image concerning the additional information is a part of a sequence of at least

two of the plurality of the images stored in the memory that were consecutively captured.

Paragraphs [0105-0106] Toyofuku teaches that when a panoramic image is captured all the

images are captured in a sequence until all the desired images for a panoramic image are captured and panoramic numbers related to the order in which the images are captured and stored in the header information. This header information is then used to determine if the image is part of a panoramic image. Since the panoramic image was captured from a sequence of consecutive images, the additional information represents whether or not the image concerning the additional information is a part of a sequence of at least two of the plurality of the images stored in the memory that were consecutively captured.

Toyofuku et al does not teach that the decision device decides whether to collectively erase the selected image and the at least one of the plurality of images related to the selected image from the memory; wherein the eraser erases the selected image and the at least one of the plurality of images relating to the selected image from the memory if the decision device decides to collectively erase the selected image and the at least one of the plurality of images related to the selected image. Toyofuku et al is designed in such a way that a user using the camera will be warned if they attempt to delete the image so that the user can cancel the erase command if the image was inadvertently selected. The camera further has the capability to allow the user to override the erase protection and erase the single image and therefore update the panoramic image data.

Suzuki teaches on Column 5, Lines 61-67 and Column 6, Lines 5-16 the method of collectively deleting images associated with a main image simultaneously to allow a user the option to erase the images related to a main image simultaneously so that the user would not have to independently erase each of the pictures and thus providing convenience of use. It is

viewed by the examiner that a panoramic image is a main image that is associated with several

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invention was made to allow the file deletion program of Toyofuku et al in view of Suzuki

collectively erase all related images simultaneously to ensure that no un-needed image files

remain after a some of the image files have been erased and therefore, speeding up the erasing

operation.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to James M. Hannett whose telephone number is 571-272-7309.

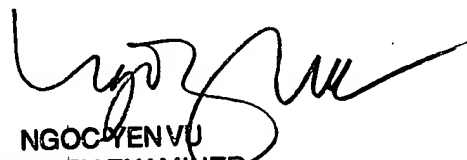The examiner can normally be reached on 8:00 am to 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc Yen Vu can be reached on 571-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James M. Hannett
Examiner
Art Unit 2612

JMH
December 1, 2005

NGOC YEN VU
PRIMARY EXAMINER